

**CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM**  
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A007 California Newt *Taricha torosa*  
Family: Salamandridae Order: Caudata Class: Amphibia

Written by: S. Morey  
Reviewed by: T. Papenfuss  
Edited by: R. Duke, E. C. Beedy  
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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The California newt occurs commonly in the Coast Ranges from central Mendocino Co. south to northern San Diego Co. Populations are also known from the Peninsular Ranges of San Diego Co. south to the vicinity of Boulder Creek (Stebbins 1985). It is found the length of the Sierra, primarily in the foothills; an isolated population also occurs near the headwaters of Shasta Reservoir in Shasta Co. A few populations are also known from the floor of the Central Valley. Occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral, but is also known from annual grassland and mixed conifer types. Elevation range extends from near sea level to about 1830 m (6000 ft) (Jennings and Hayes 1994).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Postmetamorphic juveniles and terrestrial adults take earthworms, snails, slugs, sowbugs, and insects (Stebbins 1972). Adults at breeding ponds have been shown to take the eggs of their own species (Kaplan and Sherman 1980), the eggs of other amphibians and trout, as well as adult and larval aquatic insects, small crustaceans, snails, and clams (Borell 1935). Aquatic larvae eat many small aquatic organisms, especially crustaceans.

**Cover:** Terrestrial individuals seek cover under surface objects such as rocks and logs, or in mammal burrows, rock fissures, or human-made structures such as wells. Aquatic larvae find cover beneath submerged rocks, logs, debris, and undercut banks.

**Reproduction:** Eggs are laid in small clusters on the submerged portion of emergent vegetation, on submerged vegetation, and on the underside of rocks off the bottom. Breeding and egg-laying occur in intermittent streams, rivers, permanent and semi-permanent ponds, lakes and large reservoirs. The eggs are normally laid in shallow water attached to submerged twigs or rocks.

**Water:** Rainfall is important in the maintenance of breeding ponds and streams in some localities. Newts will swim in rapids of larger streams (Stebbins 1985). Water loss during the terrestrial portion of the life cycle may be somewhat reduced by the development of a thickened and relatively unvascularized skin (Cohen 1952).

**Pattern:** Optimum habitats are in or near streams in valley-foothill hardwood and hardwood-conifer habitats.

#### SPECIES LIFE HISTORY

**Activity Patterns:** Terrestrial individuals are relatively inactive in subterranean refuges most of the year. Migrations to and from breeding areas usually occur at night during, or just following,

rains. Some migration also takes place on cloudy days. Breeding adults and aquatic larvae are active both day and night.

**Seasonal Movements/Migration:** The first rains of fall usually initiate migration to breeding localities. Once at the breeding sites, adults become aquatic and may remain in or near these ponds and streams for several weeks. Adults migrate back to subterranean refuges in the spring, where they spend the summer aestivating. Migrations are delayed until as late as May at higher elevations of the Sierra. Larvae normally transform in the summer or fall of their first year. Twitty et al. (1967) reported that juveniles of the related species, *T. rivularis*, move very little during the first few months after metamorphosis. The inactive juveniles probably remain in moist areas under objects near breeding ponds or streams until they nest in spring or summer.

**Home Range:** Little or no movement occurs during dry periods (late spring to the first rains of fall). Migrations to and from breeding sites may occasionally exceed 1000 m (3300 ft), but few individuals move that far.

**Territory:** Not territorial.

**Reproduction:** Breeding and egg-laying may extend from fall through late spring depending on the locality. Females lay many small round clusters of eggs up to 3.5 cm (1.4 in) in diameter. The number of eggs laid by a female in a single season is unknown.

**Niche:** Adults consume the eggs of *Ambystoma* and *Rana*, but whether they compete with other amphibians for food or other resources is unknown. All newts of the genus *Taricha* possess a potent skin toxin called "tetrodotoxin" (Brodie et al. 1974). The eggs and the skin of both adults and aquatic larvae contain this toxin and are, therefore, protected from most predators. This may account for the diurnal behavior of newts compared to other California salamanders.

## REFERENCES

- Borell, A. E. 1935. Water dogs eat trout eggs. *Yosemite Nat. Notes* 14:83-84.
- Brodie, E. D., Jr, J. L. Hensel, Jr., and J. A. Johnson. 1974. Toxicity of the urodele amphibians *Taricha*, *Notophthalmus*, *Cynops* and *Paramesotriton* (Salamandridae). *Copeia* 1974:506-511.
- Cohen, N. W. 1952. Comparative rates of dehydration and hydration in some California salamanders. *Ecology* 33:462-479.
- Davis, W. C., and V. C. Twitty. 1964. Courtship behavior and reproductive isolation in the species of *Taricha* (Amphibia, Caudata). *Copeia* 1964:601-610.
- Jennings, M. R. and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game. Rancho Cordova 255 pp.
- Kaplan, R. H., and P. W. Sherman. 1980. Intraspecific oophagy in California newts. *J. Herpetol.* 14:183-185.
- Riemer, W. J. 1958. Variation and systematic relationships within the salamander genus *Taricha*. *Univ. Calif. Publ. Zool.* 56:310-390.
- Stebbins, R. C. 1972. California amphibians and reptiles. Univ. California Press, Berkeley. 152 pp.
- Stebbins, R. C. 1985. A field guide to western reptiles and amphibians. 2nd ed., revised. Houghton Mifflin, Boston. 336pp.
- Twitty, V. C., D. Grant, and O. Anderson. 1967. Home range in relation to homing in the newt *Taricha rivularis* (Amphibia:Caudata), *Copeia* 1967:649-653.